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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOUND SCREENING

(57) Abstract: The present invention provides for a method for identifying an agent that has an inhibitory effect on the complex-formation of an ARE-containing mRNA and an HuR protein.

WO 03/087815 A2

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP/04008

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/47 C12N15/11 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	US 2002/165186 A1 (PRECHTEL ALEXANDER THORSTEN ET AL) 7 November 2002 (2002-11-07) page 2, paragraph 0015 page 3, paragraph 0047-0048 page 4, paragraph 0063 page 5, paragraph 0067-0068 page 5, paragraph 0073 - page 6, paragraph 0078 page 12, paragraph 0156 - page 13, paragraph 0170 page 14, paragraph 0176-0179 see page 23, SEQ-ID n° 6 ----- -/--	1-9

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

12 December 2003

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17.03.04

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# INTERNATIONAL SEARCH REPORT

International Application No.  
EP 03/04008

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 7, 8  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-9

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 7, 8

Present claims 7 and 8 relate to an extremely large number of possible inhibitors or compositions comprising the same. Across the whole specification, no support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, for a single example of a pharmaceutical composition comprising an inhibitor which has been identified by methods according to claims 1 - 6.

In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, it has been attempted to carry out a search for any substance capable of inhibiting the binding of HuR protein to ARE-comprising mRNA.

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It should be borne in mind that claims 7 and 8 relate to any molecule identified by the method of claims 1 - 6. They are not therefore limited to a compound of any precisely defined structure; they include within their scope any known or unknown molecule, with the sole requirement that these molecules are identifiable by the methods of claims 1 - 6. This manner of claiming has two consequences:

- a) Identifying a compound by an allegedly novel method does not necessarily confer novelty to the molecule (implicit lack of novelty).
- b) As the scope of product claim is not limited by any structural characteristics, the requirements of clarity and sufficiency of disclosure are not met, insofar as the broadly claimed scope is not supported by the description and the claimed alleged invention cannot be carried out by the skilled person.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP/04008

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>BRENNAN C M ET AL: "Protein Ligands to HuR Modulate Its Interaction with Target mRNAs In Vivo"</p> <p>THE JOURNAL OF CELL BIOLOGY, ROCKEFELLER UNIVERSITY PRESS, US,</p> <p>vol. 151, no. 1,</p> <p>2 October 2000 (2000-10-02), pages 1-13, XP002230286</p> <p>ISSN: 0021-9525</p> <p>abstract</p> <p>page 2, left-hand column, paragraph 3</p> <p>page 9, right-hand column, last paragraph</p>	7
Y	<p>MA W-J ET AL: "Cloning and Characterization of Hur, a Ubiquitously Expressed Elav-like Protein"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US,</p> <p>vol. 271, no. 14,</p> <p>5 April 1996 (1996-04-05), pages 8144-8151, XP002230287</p> <p>ISSN: 0021-9258</p>	9
A	<p>page 8144, left-hand column, paragraph 1 - right-hand column, last paragraph</p> <p>figure 2</p>	1-8
Y	<p>EP 0 873 998 A (TAKEDA CHEMICAL INDUSTRIES LTD) 28 October 1998 (1998-10-28)</p> <p>page 8, lines 37-46</p> <p>page 9, lines 33-34</p> <p>page 11, lines 38-41</p>	9
Y	<p>US 6 180 604 B1 (KRIEGER TIMOTHY J ET AL)</p> <p>30 January 2001 (2001-01-30)</p> <p>column 2, lines 58-64</p> <p>column 8, lines 1-11</p> <p>claims 1,11</p>	9
A	<p>PENG SHEILA S -Y ET AL: "RNA stabilization by the AU-rich element binding protein, HuR, an ELAV protein"</p> <p>EMBO (EUROPEAN MOLECULAR BIOLOGY ORGANIZATION) JOURNAL,</p> <p>vol. 17, no. 12,</p> <p>15 June 1998 (1998-06-15), pages 3461-3470, XP002264861</p> <p>&amp; ISSN: 0261-4189</p> <p>the whole document</p>	1-9

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP03/04008

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GUHANIYOGI J ET AL: "Regulation of mRNA stability in mammalian cells"  GENE, ELSEVIER BIOMEDICAL PRESS.  AMSTERDAM, NL,  vol. 265, no. 1-2,  7 March 2001 (2001-03-07), pages 11-23,  XP004230718  ISSN: 0378-1119  page 14, left-hand column, paragraph 2 -  right-hand column, paragraph 2</p>	1-9
A	<p>WO 93/23531 A (UNIV DUKE)  25 November 1993 (1993-11-25)  the whole document</p>	1-9

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/E 3/04008

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